

CLAIMS

1. Non intrusive control process of an xDSL transmission line from signals and messages exchanged between at least one emitter (1) to at least one receiver (2) during a handshaking procedure, this
5 process being characterised in that it comprises the following steps:

- detecting and identifying the standardised carriers transmitted via the line to be controlled,
- analysing the spectral power of the xDSL signals
10 exchanged,
- establishing a diagnosis on the state of the line according to the previous steps.

2. Process according to claim 1, characterised in
15 that it further comprises a step consisting of disabling the communication via the wide band channel between the emitter (1) and the receiver (2) during a short instant so as to initialise a new handshaking procedure between the said emitter (1) and the said
20 receiver (2).

3. Process according to claim 1, characterised in that the signals exchanged between the emitter (1) and the receiver (2) are defined by the ITU-T G.994.1
25 standard.

4. Process according to claim 3, characterised in that it consists of measuring the attenuation of the carriers detected to evaluate the distance between the

telecommunications centre where the control equipment is installed and the subscriber.

5 5. Control device of an xDSL transmission line
transporting several digital and/or analogue
transmission channels, said device comprising a
measuring unit (14) designed to evaluate the
performances, search for the faults and establish la
quality of the line and services transmitted, a
10 switching module (16) capable of selectively connecting
the measuring unit (14) solely to the transmission
channels to be controlled and keep active the other
channels of the transmission line, characterised in
that it further comprises means for detecting and
15 identifying standardised carriers transmitted via the
line to be controlled, means for analysing the spectral
power of the xDSL signals exchanged, and means for
establishing a diagnosis on the state of the line
according to the analysis of the xDSL signals
20 exchanged.

6. Device of claim 5, characterised in that it
further comprises means for disabling the communication
via the wide band channel between the emitter (1) and
25 the receiver (2) for a short instant so as to
initialise a new handshaking procedure between the said
emitter (1) and the said receiver (2).